

CLAIMS

- 5 1. A non-human transgenic mammal which comprises cells containing a construct of a heat shock protein (hsp) promoter linked to the growth hormone (GH) gene sequence.
2. A non-human transgenic mammal according to claim 1,
10 wherein the heat shock protein promoter is hsp70 gene promoter.
3. A non-human transgenic mammal according to claim 1, which is a rodent.
4. A non-human transgenic mammal according to claim 3,
15 which is a mouse.
5. A method for the study of chemical, physical and biological toxic agents which comprises:
- a) exposing the transgenic mammal of claims 1-4 to the toxic agent;
- 20 b) determining the effect through measurement of the hematic concentration of the reporter-gene.
6. A method according to claim 5, wherein the same animal is used for repeated tests with the same or
25 different toxic agent.
7. A method according to claims 5-6, for the study of toxicity kinetics of one or more toxic agents.
8. A method according to claims 5-6, for the study of heat stress.
- 30 9. A method according to claims 5-6, for the study of metal toxicity.

AMENDED SHEET

10. A method according to claim 9 for the study of toxicity of metals selected from the group consisting of Rb, Cu, Hg, As and Cd.

11. The use of the transgenic mammal of claim 1 for in vivo toxicity studies.

12. The use of a transgenic animal according to claim 11, wherein said animal is a mouse.